#2

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RAW SEQUENCE LISTING DATE: 03/20/2002 P.S
PATENT APPLICATION: US/10/090,326 TIME: 11:40:12

Input Set : A:\godfrey.st25.txt
Output Set: N:\CRF3\03202002\J090326.raw

5 <110> APPLICANT: University of Pittsburgh
7 Godfrey, Tony E.
9 Luketich, James D.
11 Raja, Siva
13 Kelly, Lori A
15 Finkelstein, Sydney D.

19 <120> TITLE OF INVENTION: PCR Method
23 <130> FILE REFERENCE: 010211
C--> 27 **<140> CURRENT APPLICATION NUMBER: US/10/090,326**
C--> 27 **<141> CURRENT FILING DATE: 2002-03-04**
27 <150> PRIOR APPLICATION NUMBER: 60/273,277
29 <151> PRIOR FILING DATE: 2001-03-02
33 <160> NUMBER OF SEQ ID NOS: 25
37 <170> SOFTWARE: PatentIn version 3.1
41 <210> SEQ ID NO: 1
43 <211> LENGTH: 2975
45 <212> TYPE: DNA
47 <213> ORGANISM: Homo Sapiens
51 <400> SEQUENCE: 1
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54 tcctggaact caagctcttc tccacagagg aggacagagc agacagcaga gaccatggag 120
56 tctccctcgg cccctcccca cagatggtgc atcccctggc agaggctcct gctcacagcc 180
58 tcacttctaa ccttctggaa cccgcccacc actgccaagc tcactattga atccacgccg 240
60 ttcaatgtcg cagaggggaa ggaggtgctt ctacttgtcc acaatctgcc ccagcatctt 300
62 tttggctaca gctggtacaa aggtgaaaga gtggatggca accgtcaaat tataggatat 360
64 gtaataggaa ctcaacaagc taccccaggg cccgcataca gtggtcgaga gataatatac 420
66 cccaatgcat ccctgctgat ccagaacatc atccagaatg acacaggatt ctacacccta 480
68 cacgtcataa agtcagatct tgtgaatgaa gaagcaactg gccagttccg ggtatacccg 540
70 gagctgccca agccctccat ctccagcaac aactccaaac ccgtggagga caaggatgct 600
72 gtggccttca cctgtgaacc tgagactcag gacgcaacct acctgtggtg ggtaaacaat 660
74 cagagcctcc cggtcagtcc caggctgcag ctgtccaatg gcaacaggac cctcactcta 720
76 ttcaatgtca caagaaatga cacagcaagc tacaaatgtg aaacccagaa cccagtgagt 780
78 gccaggcgca gtgattcagt catcctgaat gtcctctatg gcccggatgc ccccaccatt 840
80 tcccctctaa acacatctta cagatcaggg gaaaatctga acctctcctg ccacgcagcc 900
82 tctaacccac ctgcacagta ctcttggttt gtcaatggga ctttccagca atccacccaa 960
84 gagctcttta tccccaacat cactgtgaat aatagtggat cctatacgtg ccaagcccat 1020
86 aactcagaca ctggcctcaa taggaccaca gtcacgacga tcacagtcta tgcagagcca 1080
88 cccaaaccct tcatcaccag caacaactcc aaccccgtgg aggatgagga tgctgtagcc 1140
90 ttaacctgtg aacctgagat tcagaacaca acctacctgt ggtgggtaaa taatcagagc 1200
92 ctcccggtca gtcccaggct gcagctgtcc aatgacaaca ggaccctcac tctactcagt 1260
94 gtcacaagga atgatgtagg accctatgag tgtggaatcc agaacaaatt aagtgttgac 1320
96 cacagcgacc cagtcatcct gaatgtcctc tatggcccag acgaccccac catttccccc 1380
98 tcatacacct attaccgtcc aggggtgaac ctcagcctct cctgccatgc agcctctaac 1440

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ccacctgcac agtattcttg gctgattgat gggaacatcc agcaacacac acaagagctc 1500
tttatctcca acatcactga gaagaacagc ggactctata cctgccaggc caataactca 1560
gccagtggcc acagcaggac tacagtcaag acaatcacag tctctgcgga gctgcccaag 1620
ccctccatct ccagcaacaa ctccaaaccc gtggaggaca aggatgctgt ggccttcacc 1680
tgtgaacctg aggctcagaa cacaacctac ctgtggtggg taaatggtca gagcctccca 1740
gtcagtccca ggctgcagct gtccaatggc aacaggaccc tcactctatt caatgtcaca 1800
agaaatgacg caagagccta tgtatgtgga atccagaact cagtgagtgc aaaccgcagt 1860
gacccagtca ccctggatgt cctctatggg ccggacaccc ccatcatttc ccccccagac 1920
tcgtcttacc tttcgggagc gaacctcaac ctctcctgcc actcggcctc taacccatcc 1980
ccgcagtatt cttggcgtat caatgggata ccgcagcaac acacacaagt tctctttatc 2040
gccaaaatca cgccaaataa taacgggacc tatgcctgtt ttgtctctaa cttggctact 2100
ggccgcaata attccatagt caagagcatc acagtctctg catctggaac ttctcctggt 2160
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tctgacctgt actcttgaat acaagtttct gataccactg cactgtctga gaatttccaa 2640
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taattaattt catgggacta aatgaactaa tgaggattgc tgattcttta aatgtcttgt 2760
ttcccagatt tcaggaaact ttttttcttt taagctatcc acagcttaca gcaatttgat 2820
aaaatatact tttgtgaaca aaaattgaga catttacatt ttctccctat gtggtcgctc 2880
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ttcaataaaa atctgctctt tgtatgacag aatac 2975

<210> SEQ ID NO: 2
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<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: B-gus RT primer
<400> SEQUENCE: 2
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<210> SEQ ID NO: 3
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<212> TYPE: DNA
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<220> FEATURE:
<223> OTHER INFORMATION: B-gus forward PCR primer
<400> SEQUENCE: 3
ctcatttgga attttgccga tt 22

<210> SEQ ID NO: 4
<211> LENGTH: 22
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: B-gus Reverse PCR primer
<400> SEQUENCE: 4

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Input Set : A:\godfrey.st25.txt
Output Set: N:\CRF3\03202002\J090326.raw

204 ccgagtgaag atccccttttt ta 22
207 <210> SEQ ID NO: 5
209 <211> LENGTH: 26
211 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
219 <223> OTHER INFORMATION: B-gus taqman probe
221 <400> SEQUENCE: 5
222 tgaacagtca ccgacgagag tgctgg 26
225 <210> SEQ ID NO: 6
227 <211> LENGTH: 22
229 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
237 <223> OTHER INFORMATION: CEA Forward PCR primer
239 <400> SEQUENCE: 6
240 agacaatcac agtctctgcg ga 22
243 <210> SEQ ID NO: 7
245 <211> LENGTH: 20
247 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
255 <223> OTHER INFORMATION: CEA Reverse PCR Primer
257 <400> SEQUENCE: 7
258 atccttgtcc tccacgggtt 20
261 <210> SEQ ID NO: 8
263 <211> LENGTH: 26
265 <212> TYPE: DNA
267 <213> ORGANISM: Artificial Sequence
271 <220> FEATURE:
273 <223> OTHER INFORMATION: CEA Taqman probe
275 <400> SEQUENCE: 8
276 caagccctcc atctccagca acaact 26
279 <210> SEQ ID NO: 9
281 <211> LENGTH: 16
283 <212> TYPE: DNA
285 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
291 <223> OTHER INFORMATION: CEA RT primer
293 <400> SEQUENCE: 9
294 gtgaaggcca cagcat 16
297 <210> SEQ ID NO: 10
299 <211> LENGTH: 22
301 <212> TYPE: DNA
303 <213> ORGANISM: Artificial Sequence
307 <220> FEATURE:
309 <223> OTHER INFORMATION: 18SrRNS Taqman probe
311 <400> SEQUENCE: 10
312 tgctggcacc agacttgccc tc 22

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Input Set : A:\godfrey.st25.txt
Output Set: N:\CRF3\03202002\J090326.raw

315 <210> SEQ ID NO: 11
317 <211> LENGTH: 23
319 <212> TYPE: DNA
321 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
327 <223> OTHER INFORMATION: 18SrRNA forward PCR primer
329 <400> SEQUENCE: 11
330 ccctgtaatt ggaatgagtc cac 23
333 <210> SEQ ID NO: 12
335 <211> LENGTH: 18
337 <212> TYPE: DNA
339 <213> ORGANISM: Artificial Sequence
343 <220> FEATURE:
345 <223> OTHER INFORMATION: 18SrRNA Reverse PCR primer
347 <400> SEQUENCE: 12
348 gctggaatta ccgcggct 18
351 <210> SEQ ID NO: 13
353 <211> LENGTH: 19
355 <212> TYPE: DNA
357 <213> ORGANISM: Artificial Sequence
361 <220> FEATURE:
363 <223> OTHER INFORMATION: 18SrRNA Forward - low temp -PCR primer
365 <400> SEQUENCE: 13
366 ccctgtaatt ggaatgagt 19
369 <210> SEQ ID NO: 14
371 <211> LENGTH: 15
373 <212> TYPE: DNA
375 <213> ORGANISM: Artificial Sequence
379 <220> FEATURE:
381 <223> OTHER INFORMATION: 18SrRNA Reverse - low temp PCR primer
383 <400> SEQUENCE: 14
384 gctggaatta ccgcg 15
387 <210> SEQ ID NO: 15
389 <211> LENGTH: 16
391 <212> TYPE: DNA
393 <213> ORGANISM: Artificial Sequence
397 <220> FEATURE:
399 <223> OTHER INFORMATION: B-gus RT primer
401 <400> SEQUENCE: 15
402 tggttgtctc tgccga 16
405 <210> SEQ ID NO: 16
407 <211> LENGTH: 18
409 <212> TYPE: DNA
411 <213> ORGANISM: Artificial Sequence
415 <220> FEATURE:
417 <223> OTHER INFORMATION: B-gus Forward PCR Primer - low temp
419 <400> SEQUENCE: 16
420 ctcatttgga attttgcc 18
423 <210> SEQ ID NO: 17

RAW SEQUENCE LISTING DATE: 03/20/2002
PATENT APPLICATION: US/10/090,326 TIME: 11:40:12

Input Set : A:\godfrey.st25.txt
Output Set: N:\CRF3\03202002\J090326.raw

425 <211> LENGTH: 17
427 <212> TYPE: DNA
429 <213> ORGANISM: Artificial Sequence
433 <220> FEATURE:
435 <223> OTHER INFORMATION: B-gus Reverse Primer - Low temp
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438 cgagtgaaga tcccctt 17
441 <210> SEQ ID NO: 18
443 <211> LENGTH: 15
445 <212> TYPE: DNA
447 <213> ORGANISM: Artificial Sequence
451 <220> FEATURE:
453 <223> OTHER INFORMATION: CEA taqman probe
455 <220> FEATURE:
457 <221> NAME/KEY: misc_feature
459 <222> LOCATION: (15)..(15)
461 <223> OTHER INFORMATION: Uracil residue
465 <220> FEATURE:
467 <221> NAME/KEY: misc_feature
469 <222> LOCATION: (4)..(4)
471 <223> OTHER INFORMATION: Uracil residue
475 <400> SEQUENCE: 18
W--> **476 agcngcccaa gcccn 15**
479 <210> SEQ ID NO: 19
481 <211> LENGTH: 23
483 <212> TYPE: DNA
485 <213> ORGANISM: Artificial Sequence
489 <220> FEATURE:
491 <223> OTHER INFORMATION: Tyrosinase Forward PCR primer
493 <400> SEQUENCE: 19
494 acttactcag cccagcatca ttc 23
497 <210> SEQ ID NO: 20
499 <211> LENGTH: 23
501 <212> TYPE: DNA
503 <213> ORGANISM: Artificial Sequence
507 <220> FEATURE:
509 <223> OTHER INFORMATION: Tyrosinase Reverse PCR Primer
511 <400> SEQUENCE: 20
512 actgatggct gttgtactcc tcc 23
515 <210> SEQ ID NO: 21
517 <211> LENGTH: 29
519 <212> TYPE: DNA
521 <213> ORGANISM: Artificial Sequence
525 <220> FEATURE:
527 <223> OTHER INFORMATION: Tyrosinase Taqman probe
529 <400> SEQUENCE: 21
530 tctcctcttg gcagattgtc tgtagccga 29
533 <210> SEQ ID NO: 22
535 <211> LENGTH: 17

→ Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 03/20/2002
PATENT APPLICATION: **US/10/090,326** TIME: 11:40:13

Input Set : **A:\godfrey.st25.txt**
Output Set: **N:\CRF3\03202002\J090326.raw**

L:27 M:270 C: Current Application Number differs, Replaced Current Application No
L:27 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:476 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:644 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25